

Hardware:

Pulsa's membership is comprised of ten complementary individuals working simultaneously and interactively, but independantly with an evolving system. Rather than a common ideology implying a common style of individually produced artworks, the basis of Pulsa's art has been its commitment to an ongoing involvement with the total means of producing environmental phenomena. Assuming that evolved art arises from the artist's feedback enriched experience with his media, Pulsa's members have regarded the development of techniques for controlling perceptible wave energies as their principle common objective. Since Pulsa's intent was to work with a new art form based on techniques not previously existent, the group's first project was to systematically originate instrumentation necessary to create, study, and refine environmental phenomena. Both the actual design of control equipment and more importantly its generalized application in association with a variety of input and output devices in a variety of specific environments were regarded as part of a long term evolutionary process the result of which would be not environments or phenomena, but an increasing generalized knowledge of and associated instrumentation for generating and

controlling phenomena.

From this vantage, technical specialists are members of the group in every way equal to artistic specialists; all share equally and with increasing understanding in both aesthetic and technical decisions. Individual opinions are less useful than facts about the system. Consensus is the means by which all decisions are made, all members openly discussing issues in question not in terms of individual aesthetic or personal preferences, but instead in terms of notions of maximum applicability, flexibility, compatibility with existing or projected instrumentation, and ability to provide rich and varied information feedback.

Software:

Parallel to the systems aspect of Pulsa's group process is the rich interconnection effect of multiple involvement in extended projects and proposals. In as much as their work has been both systematic and sustained, one of the group's goals has been individual familiarity with all aspects of the project, permitting a complete interchangeability of roles. Though specialization persists at the varying levels at which energy is manipulated (e.g., circuit design, configuration design, program design, system design, etc.), constant overlapping

implies a fluid organization modeled after a "closed loop" feedback system (see Boguslaw, The New Utopians, pp. 31-32), characterized by many simultaneous viewpoints without static definition or a single dominating logic. The multiplicity of available individuals for any given job has led to an approach which finds its prime model in the activity of the human brain, where many ideas are simultaneously entertained until contingencies clarify bases for specific action. Digital computers are capable of processing large quantities of information with high speed and accuracy through centralized functioning. Like the human brain, Pulsa operates on principles of parallel processing. Both Pulsa and other computer system designers are presently working toward developing more flexible intelligent systems capable of simultaneously performing a variety of interactive operations. Similarly, the group itself is moving away from all centralized function structures toward a richer use of individual intelligences. Pulsa is approaching a point at which specialization becomes irrelevant due to the fact that the operating control system speaks a simplistic environmental language or even operates autonomously. In this sense their objective is an intelligent system which in itself embodies the optimum

state of the group's and the system's interactive functioning, which itself constitutes their ultimate work of art.

Within Pulsa the sustained multiplicity of ideas and procedural openness contributes to a unique energy level related to all forms of collective-energy consciousness (e.g., tribal music, architecture without architects (Rudolfsky), Pre-Columbian temples, etc.). A product of collective intelligence unified through systematic implementation, the resultant art form is public. This public quality is contemporarily manifest in that the art work transcends the personally expressive tradition of objecthood and the private "art" experience with objects in museums. Within the prospective of structuralist interpretations of cultural history, perhaps this work has much in common with such monolithic, one-spirited cultural expressions as the pyramids of Egypt. In such a context, Pulsa's use of computer systems serves as an integrating factor which might when fully developed serve our culture as richly as calligraphy has served Islam, "giving equal value to everything that exists" (see Grube, World of Islam, p 11), through its unifying application to every decoratable surface.